

# HOW DO WE GET THERE?

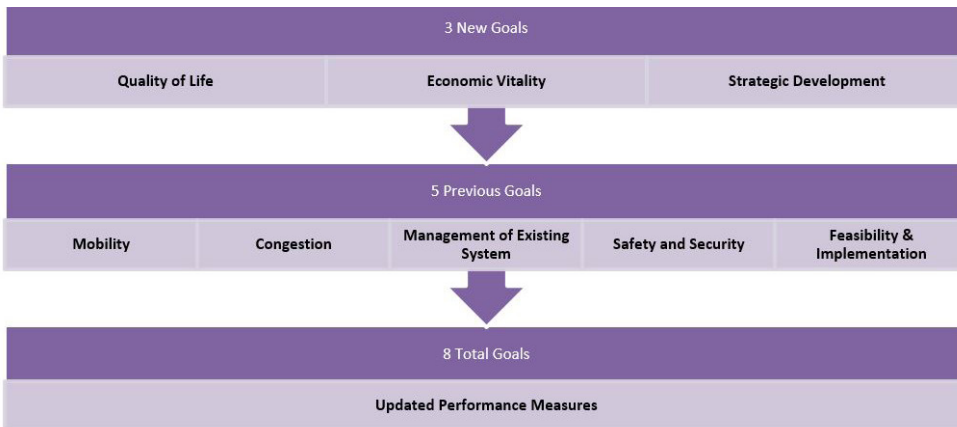
SECTION 7

# IMPLEMENTATION STRATEGY

## Project Prioritization

### Introduction

As part of this Multimodal Plan, a methodology was developed for scoring and prioritizing thoroughfare projects. The outputs from this tool can assist in the process of making future budget and bond program decisions. The mobility improvement recommendations will be subject to the City of San Antonio’s budgeting process and the availability of funding. In order to move towards implementation of all recommendations, complete funding sources must be identified. There are often fiscal constraints that impede the implementation of all desired infrastructure improvements, and it is understood there will be trade-offs in the selection of priority mobility projects.



### Technical Approach

The prioritization process is intended to provide decision-makers in San Antonio with a data-driven tool. This tool will evaluate recommendations and identify improvements to the future street infrastructure that best meet the City’s objectives and are most essential to the transportation system’s long-term success. Street investment recommendations may be prioritized objectively based on quantitative and qualitative evaluation measures.

This prioritization process builds upon the City’s prioritization method developed for the 2012 bond program. The original set of prioritization questions has been condensed into 5 goals: mobility, congestion, management of the existing system, safety and security, and feasibility and implementation. Three additional goals have been



SA Project Prioritization

identified that give a more comprehensive evaluation of a project’s value. These goals include quality of life, economic vitality, and strategic development.

To evaluate consistency between the identified projects and goals, performance measure questions were developed. A mapping and data analysis tool was used to measure the value of each project within each goal and objective. The more a street improvement advances a particular goal, the higher the resulting score. Over time, additional performance measures may be prioritized by the City and this tool can be adapted to evaluate these priorities.

## Ranking Factors

A project scoring matrix allows projects to be scored based on how well improvements satisfy objectives in eight goal categories. These goals include:

### Quality of Life

- » This goal seeks to prioritize projects that enhance the health and wellbeing of San Antonio's population and the natural environment.

### Strategic Development

- » This goal seeks to prioritize projects in areas where new investment will utilize existing investments and be responsive to land use patterns.

### Mobility

- » This goal seeks to prioritize projects that enhance access and connectivity (minimize gaps) across all modes of transportation.

### Safety and Security

- » This goal seeks to provide a transportation system safe for all users and secure against natural disasters.

### Economic Vitality

- » This goal seeks to prioritize projects that strengthen and increase economic opportunity across San Antonio by connecting people to employment while preserving the efficient movement of goods.

### Congestion

- » This goal seeks to prioritize projects that maximize the efficiency of vehicular travel within the roadway network.

### Management of Existing System

- » This goal seeks to prioritize projects that improve the effectiveness and condition of existing infrastructure through targeted investments.

### Feasibility and Implementation

- » This goal seeks to prioritize projects that are shovel-ready and have demonstrated support among all project sponsors.

## Goal Weighting and Scoring

Each goal category has a weighted value, which gives higher precedence to certain objectives over another. The goal “weights” are flexible and may be updated over time, allowing the City to customize the prioritization process based on what attribute is most important. Several objective categories were developed which can be evaluated based on available city data and qualities of the candidate project. Once all objectives have been evaluated, a final score out of 100 points is produced, allowing projects to be compared and ranked.

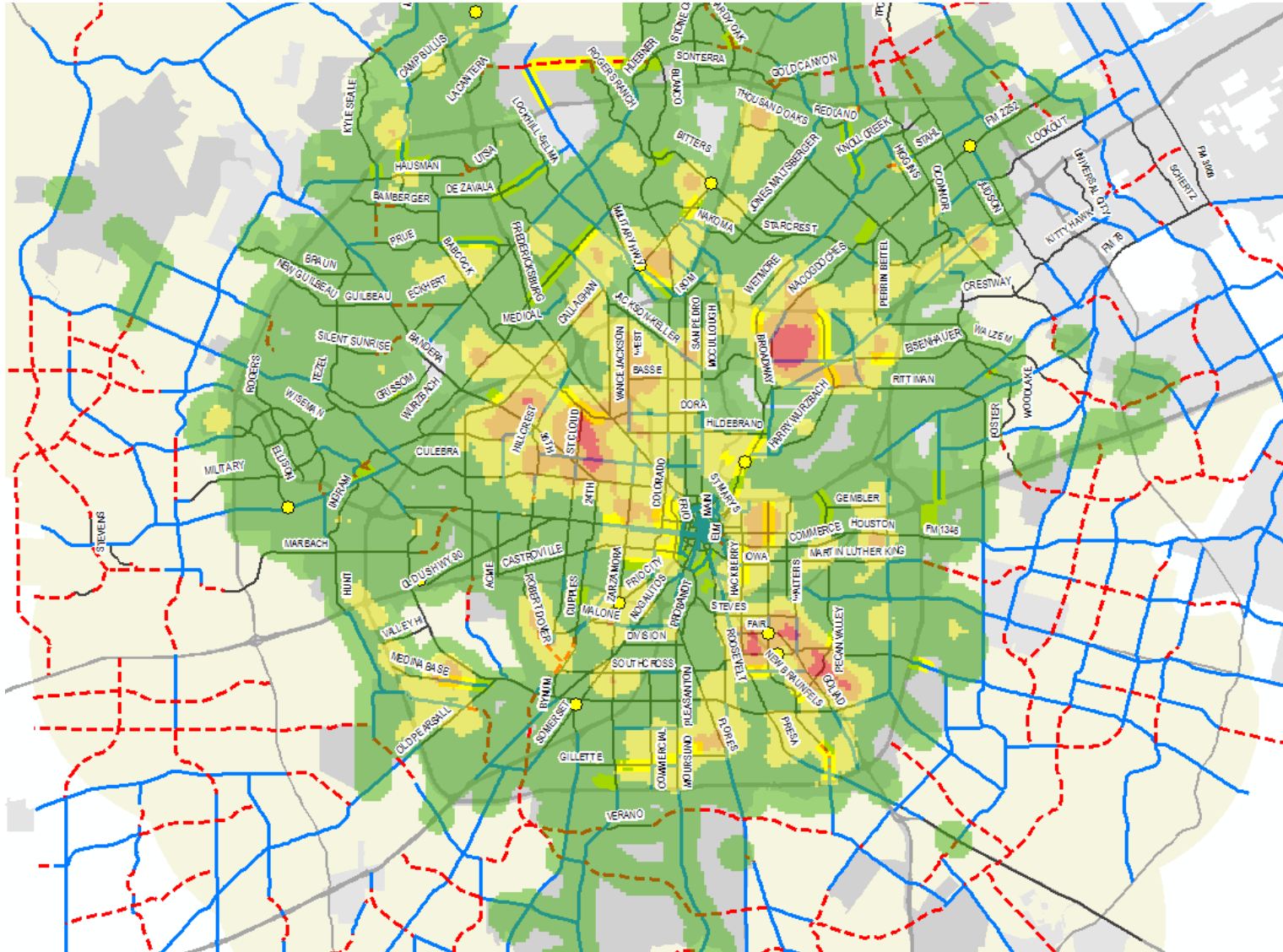
## Prioritization Data and Tool

Evaluating potential infrastructure projects is accomplished by compiling all available data to determine how a street improvement matches with the objective performance measures. Data directly related to the objectives and performance measures was compiled into a single spatial map database. This GIS map tool (Figure 25) allows for the effective scoring of how various street projects may improve mobility and satisfy goals of the transportation system. Once individual scoring results have been determined from this map analysis, a total project score may be calculated by using the prioritization scoring matrix. This database can and should be updated over time as newer data becomes available or if different performance measures are selected.



## 5 Year Action Plan:

- » Utilize the Prioritization Tool to rank projects for the CIP.



*This map visually displays the evaluation of sidewalk gaps throughout the City. The areas in red represent higher concentrations of missing sidewalk linkages within developed areas.*

*Figure 25 : Example of the Prioritization Tool Evaluating Pedestrian Connectivity in GIS*

## HOW DO WE GET THERE?

### Funding Strategies

In its simplest form, the purpose of a multimodal funding strategy is to match existing and potential federal, state, regional and local revenue sources with the projects and citywide programs included in SA Tomorrow that will further the City's transportation objectives. The key is to identify and secure the most reliable funding sources and allocate them in the most effective way possible.

It is very likely that SA Tomorrow transportation projects will rely upon many funding sources to address a range of project types and sizes. The financial plan must be structured to take advantage of those sources as efficiently as possible recognizing the competing needs for transportation elsewhere in the region. The funding program must also be flexible enough to recognize that funding sources – and the size of their revenue pools – may change over time, so it is essential to monitor and update the financial



assumptions on a nearly continuous basis. In the end, the financial plan must be realistic and provide a good foundation for the implementation program.

A well-designed funding program with supportive policies has advantages that strengthen the implementation program and which can foment not only the transportation improvements needed, but also the associated land use and system management elements that will contribute to San Antonio's quality of life.

After summarizing the benefits of a comprehensive funding program, this document briefly describes federal, state, regional and local funding sources currently available to the City of San Antonio, and summarizes a number of potential new revenue sources and financial strategies – or existing revenue sources not typically used for transportation, but which might be - which should be explored as SA Tomorrow advances in development.

### Benefits of a Well-Designed Funding Program

- » Will provide clear guidance to SA Tomorrow's short- and long-term capital investments.
- » Will improve the likelihood of obtaining competitive grants, since projects and programs can be shown to achieve multiple goals in federal, state, regional and local plans. Grant applications can also be more complete showing the support of partner agencies and stakeholders by focusing project development resources around the implementation program's priorities
- » Will establish a clear link between revenues (including their restrictions for use) and eligible projects and programs. An example of this would be determining what funding is available for freight investments or public transportation projects.
- » Will create a near term "project development pipeline" of projects aligned with federal, state, regional and city funding priorities that are compatible with and lead to the long term vision of the plan and warranted by a performance-based prioritization process.
- » Will create an understandable and defensible plan that allows for a more meaningful public deliberation about priorities in all sectors and communities

### WHERE WILL WE GET THE FUNDS?

The financial plan created to fund the projects from the Multimodal Transportation Plan must be structured to take advantage of a number of funding sources as efficiently as possible, recognizing the competing needs for transportation elsewhere in the region.

## Existing or Available Funding Sources

**Proposition 7 – Congestion Relief** - The Texas Sales and Use Tax Revenue for Transportation Amendment, or Proposition 7, was approved by voters on The measure supplies funding to the State Highway Fund from two tax revenue sources: 1) sales and use tax and 2) state motor vehicle sales and rental tax.

**Proposition 1 – Oil and Gas Severance** – Allocates one-half of the oil and gas severance tax currently collected on oil and gas production in Texas to the state highway fund for 10 years. The severance allocation adds about \$1.7 billion a year to the state’s transportation funding.

**Tolls - Alamo Regional Mobility Authority** - A Regional Mobility Authority (RMA) is a local transportation authority that can build, operate, and maintain toll roads, as well as other transportation projects. The Texas Legislature authorized the creation of RMAs in 2001 under

Senate Bill 342. The Alamo Regional Mobility Authority is an independent governmental agency created by the Texas Transportation Commission and the Bexar County Commissioners Court in December 2003, to accelerate needed transportation projects in Bexar County.

**Sales tax** – Sales taxes are the most prevalent source of transportation funding in the U.S. They are typically subject to a vote of the population at large and can be structured in many ways. San Antonio’s current sales tax rate is 8.250%. Of that, the amounts collected for transportation improvements include 6% for TxDOT and 1% under the Advanced Transportation District (ATD) Sales Tax. The ATD is distributed: 0.250% San Antonio ATD (Advanced Transportation District); 0.500% VIA; and 0.250% to the State of Texas.

## New or Untapped Funding Sources

In addition to the funding sources already available to the City of San Antonio and the region, there are other possible revenue sources that could be used to implement the projects identified in SA Tomorrow. Some of these rely on a “value capture” approach to raising funds and others focus on attracting private funding. In addition, new incarnations of traditional sources are identified with specific applications that could support some of the projects in the program.

For the purposes of SA Tomorrow, transportation funding with the flexibility to be used on any mode or project that contributes to mobility within the city allows for a comprehensive approach to delivering the entire modal network. Funds that are mode-specific limit the community’s ability to leverage projects to gain the benefits of a comprehensive multimodal system that offers choice and alternatives.



## Funding Within City Purview

### Value Capture Options/ Special Districts

The following strategies generate revenue based on the increasing value derived by properties within a given area that will benefit from a transportation investment.

#### **Tax increment financing districts (TIF)**

– A public value capture financing method that is used as a subsidy for redevelopment, infrastructure, and other community improvements. Through the use of TIF, municipalities typically divert future property tax revenue increases from a defined area or district toward an economic development project or public improvement project in the community.

- » **Tax Increment Reinvestment Zones (TIRZ)** – Tax increment financing is a tool that local governments can use to publicly finance needed improvements to infrastructure and buildings within a designated area known as a reinvestment zone. The cost of improvements to the reinvestment zone is repaid by the future tax revenues of each



*Howard Peak Greenway Trail, San Antonio, TX*

taxing unit that levies taxes against the property. Each taxing unit can choose to dedicate all, a portion of, or none of the tax revenue gained as a result of improvements within the reinvestment zone.

- » **Transportation Reinvestment Zone** - The local governing body designates a zone in which it will promote a transportation project. Once the zone is created, a base year is established and the incremental increase in property tax revenue collected inside the zone is used to finance a project in the zone.

#### **Transportation Benefit District/**

**Transportation Impact District** – these districts operate as quasi-municipal corporations and independent taxing districts that can raise revenue for

specific transportation projects. Vehicle license and registration fees or sales taxes are the most common method used to generate revenue. Sometimes border area fuel taxes, bonds and impact fees are used. The revenue may be used for transportation improvements included in a local, regional or state transportation plan and can range sidewalks to roads, to transit service and transportation demand management measures. Transportation Benefit Districts are currently in place in Washington State.

**Assessment districts** - Designates a unique charge that government units can assess against real estate parcels for certain public projects. This charge is levied in a specific geographic area known as a special assessment district (SAD). A special assessment may only be levied against parcels of real estate which have been identified as having received a direct and unique "benefit" from the public project.

**Business improvement districts (BID)**

- A BID is a defined area within which businesses are required to pay an additional levy to fund projects within the district's boundaries. The BID is often funded primarily through the levy but can also draw on other public and private funding streams. BID formation is generally subject to a vote of the affected businesses. San Antonio currently has such an example in the downtown. The Public Improvement District (PID) is operated under the management of Centro, an organization focused on

improving and attracting development to the downtown.

**Community facility districts (CFD)** - at the most basic level, CFDs are the legal authority, given by a vote of the affected landowners, to levy and collect a special tax, to use that revenue to finance specified facilities and services (including maintenance and operations), and to borrow money (by issuing bonds or incurring other debt) to assist with financing the facilities.

**Parking benefit district (PBD)** – A PBD generates revenue from parking meters within a specified district to fund pedestrian, bike, and transportation improvements in that district. Improvements typically include improved sidewalks, curb ramps, and street trees. These amenities will support increased residential densities and accommodate multimodal transportation. The parking meters, in addition to collecting revenue, might also serve as a vehicle to promote alternative transportation. In the case

of the City of Austin, the meters carry messages with information about alternative transportation in the area to increase awareness among residents.

**Taxes**

Although not currently used for transportation purposes in San Antonio, there are a number of taxes which are used elsewhere in the state or country to fund investments in improved transportation. These taxes are summarized below. The collection of some taxes may require state legislative approval.

**Property tax** - Property tax is a levy on real estate. The tax is usually based on the value of the property (including the land) and is usually assessed by local or municipal governments. Local governments use property taxes for many purposes from infrastructure to schools. Assessing additional tax requires approval by a majority (sometimes a supermajority) of the property owners in the affected area. The property tax rate for the City of

San Antonio consists of two components: Maintenance & Operations (M&O) and Debt Service. The Fiscal Year (FY) 2016 M&O tax rate is 34.677 cents per \$100 of taxable value. The FY 2016 Debt Service tax rate is 21.150 cents per \$100 of taxable value. These two tax rate components together provide for a total tax rate for FY 2016 of 55.827 cents per \$100 of taxable value.

**Hotel tax** – San Antonio’s current Hotel Occupancy Tax rate of 16.75% and is levied on every room night charge and is distributed as follows: 7.00% City of San Antonio; 1.75% Bexar County; 6.00% State of Texas; and 2.00% dedicated to the City of San Antonio Convention Center Expansion. Some communities have dedicated a portion of the hotel or hospitality tax to transportation improvements that benefit the hospitality industry.

**Local option gas tax** – In addition to a state gas tax, local communities could impose their own gas tax generating funds that would remain in the local area. In San Antonio, a 5 cent local gas tax is forecast to generate about \$200 million over five years<sup>1</sup>, but the long term prospects for gas tax revenues are limited with improving vehicle fuel economy. Florida allows local gas taxes. The revenues are dedicated to road maintenance and bridge repair.

**Payroll taxes** - Payroll taxes are taxes imposed on employers or employees, and are usually calculated as a percentage of the salaries that employers pay their staff. Payroll taxes generally fall into two categories: deductions from an employee's wages, and taxes paid by the employer based on the employee's wages. TriMet, the Portland, Oregon transit provider, uses the latter type of payroll taxes as its primary source of revenue for their public

transportation system. TriMet collects payroll tax paid by employers within its transit district, generating revenue that makes up more than half of its \$531 million budget.<sup>2</sup>

**Gross receipts tax** - A gross receipts tax or gross excise tax is a tax on the total gross revenues of a company, regardless of their source. A gross receipts tax is similar to a sales tax, but it is levied on the seller of goods and services and can generate higher revenues. A gross receipts tax is used in New Mexico and Hawaii and a number of other states.

**Rental car tax** - A gross rental receipts tax is imposed on motor vehicle rentals. The percent of tax imposed is based on the length of the rental contract. In Texas, the rate is 10% for most rentals (under 30 days).

<sup>1</sup> Texas A&M Transportation Institute, <http://mobility.tamu.edu/mip/strategies.php>

<sup>2</sup> The Oregonian, February 10, 2016

### Growth Payments

The objective of these fees is to assess development for the costs imposed by projects on infrastructure systems. They are designed to be commensurate with the burden placed on the system.

**Impact fees** – Projects contribute to offsite infrastructure costs that benefit the project based on the size, type of development to be built and the level of use anticipated by the project. The higher the number of project trips using the facility, the higher the fee paid to offset costs. In practice, this has typically been limited to only a portion of the full cost of the project to recognize that the demand placed on most public infrastructure comes from multiple development projects and other sources. This funding method can work effectively in times of rapid growth and when projects follow a leapfrog development pattern. They can be used under other conditions, but they are less applicable under orderly growth patterns because development funding



*Hausman Road Project, San Antonio, TX*

follows the growth in a more predictable pattern. Projects pay for infrastructure as it happens. In slow development times, the collection of fees can be sporadic and unreliable unless arranged by prior agreement with development interests. That seldom happens.

**Sprawl containment fees** - Funds dedicated to public transportation and active transportation by projects that have to pay a fee and ongoing maintenance charges to gain approval to build outside the “transit-critical zone (TCZ)”. The TCZ is defined by an area of transit service intensity and measured from the center of the city or a designated regional activity center. In lieu of payment of fees, they have pay to extend bus services at 20 minute headways and bikeways/multi-use paths to the new development. If Bexar County is going to take in one million new residents by 2040, there needs to be a stronger linkage between transportation choices and new land use plans to avoid “business-as-usual”. (Need to make it

more attractive, and even more profitable, to build near existing urban infrastructure than in less developed areas.)

### **Funding That Requires Action by Others**

#### **Joint Development Opportunities**

Joint Development is not a source of funding but a financial strategy that builds on a partnership between a public entity and a private developer created to develop certain assets. According to FTA guidance, the development and the property must have a physical and a functional relationship. Joint Development can occur when an agency owns land that can be leased to the developer for a long period of time. This enables the developer to build on the land with a low risk of losing the capital investment. In exchange, rents are paid to the agency, creating a revenue stream that can be bonded against to support the development of a transit improvement. The revenue potential can vary depending on market conditions.

#### **Use Fees/Taxes**

A use fee is a cost associated with the level of use imposed by an individual on the transportation system. Much like a utility charges fees for use, these are intended to offset the cost of construction and maintenance of the system by charging users a fee proportionate to the amount of benefit derived from its use.

#### **Vehicle Miles Travelled (VMT) fees** –

VMT fees are distance-based fees levied on a vehicle user for use of a roadway system. They are based on the level of facility usage as opposed to a gas tax that charges based on the amount of fuel consumed. In a broad sense VMT fees are envisioned to be applied through the use of an onboard vehicle device to capture the distance driven by a vehicle through GPS or other technology and relate that to a method of charging, which could range from manual cash payment to automatic deduction for a prepaid customer account.

**Carbon fee** – A carbon tax is usually defined as a tax based on greenhouse gas emissions (GHG) generated from burning fossil fuels. It puts a price on each ton of GHG emitted, with the objective to reduce emissions through implementation of alternative technologies and modes.

One approach to assessing a carbon fee is through a “Carbon cap and trade program.”- A cap-and-trade program sets a clear limit on greenhouse gas emissions and minimizes the total costs to emitters while achieving the target. This limit is translated into tradable emission allowances (each allowance typically equivalent to one metric ton of carbon dioxide or carbon dioxide equivalent), which are auctioned or allocated to regulated emitters on a regular basis. At the end of each compliance period, each regulated emitter must surrender enough allowances to cover its actual emissions during the compliance period. The total number of available allowances decreases over time to reduce the total amount of

greenhouse gas emissions. By creating a market, and a price, for emission reductions, the cap-and-trade system offers an environmentally effective and economically efficient response to climate change. Although a significant number of emission allowances will be freely allocated in California’s program, many will also be sold at auction. Revenues derived from such sales can be used to fund transportation improvements.

**Tolls** - A toll road, also known as a turnpike or tollway, is a public or private roadway for which a fee (or toll) is assessed for passage. It is a form of road pricing typically implemented to help recoup the cost of road construction and maintenance. In San Antonio, this is within the purview of the Alamo Regional Mobility Authority. In addition to traditional tolling, advanced technologies now enable additional revenue collection strategies, such as:

- » **Managed lanes** - A managed lane is a type of highway lane that is operated with a management scheme, such as lane use restrictions or variable tolling, to optimize traffic flow, vehicle throughput, or both.
- » **Smart/Managed motorways** - Smart motorways or managed motorways are highways that use active traffic management (ATM) techniques to optimize capacity by use of variable speed limits and access point controls at a network level. Benefits include smoother traffic flows, more reliable journey times, fewer road traffic collisions, and reduced noise and harmful vehicle emissions.



*Katy Tollway, Houston, TX*

<sup>[3]</sup> <http://mobility.tamu.edu/mip/strategies.php>

**Sales Tax on gasoline** – this is a sales tax applied to gasoline and diesel purchases that is in addition to the gas tax. Few states apply this levy, but it can generate large sums of money for transportation purposes. California raises funds to pay for transportation with a sales tax on gasoline and diesel fuel. In Texas, according to research by TTI<sup>3</sup>, a 5 cent tax on a gallon of gas costing \$3.50 per gallon would generate \$12.7 billion a year.

**Real estate transfer tax** - Real estate transfer taxes are taxes imposed by states, counties and municipalities on the transfer of the title of real property within the jurisdiction. Real estate transfer taxes can also be used for specific purposes, such as transportation, affordable housing and open space development. Texas is one of a minority of states that does not impose a real estate transfer tax.

## Federal Programs

### Section 5307 Urbanized Area Formula Program

Over \$4.5 billion in federal formula funding is provided nationwide to urbanized areas for public transportation capital, planning, and preventative maintenance purposes. Funding is allocated according to population and also a combination of existing transit service factors including bus revenue vehicle miles, bus passenger miles, fixed-guideway revenue vehicle miles, and fixed-guideway route miles. A minimum 20 percent local match is required to use these funds.

### Section 5339 Bus and Bus Facilities Program

The FAST Act authorizes over \$3.7 billion through 2020 for capital investments in bus and bus facilities. While the majority of these funds are administered by formula (and, like Section 5307, used exclusively by WMATA in the Northern Virginia area), \$268 million in FY 2016

– growing to \$344 million by 2020 – is available nationally on a discretionary basis. No single grantee may receive more than 10 percent of the annual program.

### Congestion Mitigation and Air Quality Improvement Program (CMAQ)

FHWA's CMAQ program funds are distributed to air quality maintenance or non-attainment areas (regions that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter) using a formula based on an area's population by county and the severity of its ozone and carbon monoxide problems within a non-attainment or maintenance area. Funds are available to transportation projects and programs for the purpose of reducing congestion and improving air quality. CMAQ funding can be used for the capital costs of transit projects and up to 5 years of the operating costs of new transit service.

### Surface Transportation Block Grant Program (STBGP)

FHWA's STBGP funds are distributed to states and MPOs using a formula based on lane-miles of federal-aid highways, total vehicle-miles traveled on federal highways, and estimated contributions to the Highway Account of the Highway Trust Fund attributable to commercial vehicles. Eligible projects include highway, transit, intercity bus, bicycle, and pedestrian projects.



### “TIGER” Program

The Transportation Investment Generating Economic Recovery (TIGER) program is a highly competitive USDOT grant program supporting the capital costs of road, rail, transit, and port projects that have a significant impact on the nation, a region, or a metropolitan area. Since 2009, TIGER grants have provided over \$4.6 billion in funding to 381 transportation projects that are multi-modal, multi-jurisdictional, or otherwise challenging to fund through existing programs. Another \$500 million will be available in 2016. During the 2015 round of TIGER grants, the 627 applications received by USDOT requested more than 20 times available funding, with only 39 projects receiving awards. For successful projects in urban areas, the TIGER program typically delivers \$10 - \$20 million in capital funding.

Compliance with TIGER’s evaluation criteria, demonstrated commitment of local match, and broad local consensus—



*Light Rail, Denver, CO*

including support from both traditional and non-traditional partners —are key requirements to being competitively positioned for TIGER funding. USDOT also prefers projects that have performed considerable project development (e.g., completed federal environmental review).

### **TIFIA**

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance surface transportation projects of national and regional significance. TIFIA leverages federal funds by attracting private and non-federal investment in projects that critically improve the nation’s surface transportation program. TIFIA credit assistance provides improved access to capital markets, flexible repayment terms, and potentially more favorable interest rates than can be found in private capital markets for similar instruments. A corollary benefit is that TIFIA financing

enables the applicant to receive more favorable interest rates for the project’s share of non-federal borrowing due to lowered investment risk.

Many surface transportation projects—highway, transit, railroad, intermodal freight, and port access—are eligible for assistance. Each dollar of federal funding applied to TIFIA (as the subsidy amount) can provide approximately \$10 in credit assistance—and leverages approximately \$30 in transportation infrastructure investment. TIFIA has certain eligibility requirements, sets forth a specific repayment structure and is subject to program limits established by the USDOT in surface transportation bills.

## **Conclusion**

There is not one funding strategy or one source that will provide the needed resources for the City to implement a multimodal transportation plan. San Antonio must develop a funding strategy that identifies a variety of sources

of future funding and recommends modifications to existing funding sources so that all opportunities are considered and all modes of transportation are funded. This type of effort requires a commitment by the City to continuously be aware of all transportation opportunities at the Federal, State, private and local level. The City of San Antonio should identify a key position within the Transportation & Capital Improvements (TC) Department that would be dedicated to this endeavor full time. Supporting professionals within TCI and possibly other City departments would need to provide necessary support for the submission of grant applications or the justification for a funding proposal. In order to compete with the largest cities in the country for the limited transportation dollars available, the City of San Antonio must have the internal capabilities to collectively seek funding opportunities and to join forces with other agencies, as needed.

## 5 Year Action Plan

### Policies and Practices to Implement Multimodal Transportation Plan Goals

#### Funding & Prioritization

1. Implement the SA Tomorrow-based project prioritization criteria and methodology for ALL street projects in the 2017 Bond election.
2. Develop a performance-based programming process that is based on achieving the City's Comprehensive Plan goals and transportation objectives to rate, rank and prioritize projects as a basis of allocating funding in the capital improvement program.
3. Implement targets that designate funds for projects that improve ALL modes, including walking, biking, and transit-supportive.
4. Allocate necessary funding and adopt needed policies to support VIA implementation of improved transit such as Primo service on Zarzamora and SW Military.
5. Investigate all potential funding opportunities and develop a comprehensive funding strategy, including applicable new or unused revenue opportunities, to program and fund identified capital improvements.

#### Multimodal Transportation

6. Implement Unified Development Code (UDC) updates in order to reflect changes to the Major Thoroughfare Plan (MTP) to allow more flexibility for complete streets implementation.

7. Develop policy structure to commit to a pedestrian/bicycle/transit friendly environment in all regional activity centers identified in Comprehensive Plan.
8. Designate portion of roadway improvement funding to be applied towards identification and implementation of projects featuring new technology, and emerging strategies.
9. Educate residents of San Antonio on Complete Streets and how they can benefit them to enhance and connect neighborhoods and Regional Centers
10. Recommended amendments to the Major Thoroughfare Plan (MTP) alignments identified in the Multimodal Transportation Plan will be evaluated and recommended by the MTP Committee.
11. Develop a revised policy that includes a thorough evaluation and establishes key criteria that should be considered, including connectivity and function, when reviewing and recommending MTP changes that would allow an alignment to be modified or removed from the MTP.
12. Consider UDC policies that require the construction of collectors by developers as they're subdividing property between arterials. This approach (in lieu of placing collectors on the MTP Map) allows developers the ability to identify the alignment that best serves their development, while improving the connectivity of the overall MTP.

### Encouraging Other Modes - Walking

13. Implement policy changes to design requirements that improve pedestrian system and encourage walkability, i.e., minimum sidewalk widths of 6 feet with 3 foot buffer for higher density residential areas, 10 feet for downtown and in locations designated for transit oriented development.
14. Require sidewalks to be placed at outside limits of right-of-way, etc. Allow midblock crosswalks with required safety features at locations with high pedestrian demand along roadways with high traffic volumes and long crossing distances.
15. Promote pedestrian activity by prioritizing the completion of the pedestrian network that serves major activity centers, transit stops, etc.

## Encouraging Other Modes - Cycling

16. Implement policy changes to design requirements that improve the bicycle network and encourage cycling, i.e., barrier separated facilities on arterials where posted speed limits are above 35 mph.
17. Develop phasing plans for construction of bicycle facilities associate with development, i.e., ROW dedication, construction of curb, paving and implementation of temporary striping of shoulder until such time as connectivity is possible.
18. Develop process for implementing bicycle facilities that includes outreach to stakeholders in advance of construction.
19. Transform the B-Cycle bike-share system into a substantive transportation option with 100 stations and 1,000 bicycles
20. Evaluate needs and costs of the program and commit a predetermined percentage of the capital budget each year as a core program for pedestrian and bicycle improvements.
21. Prioritize the completion of the bikeway network that serves bicyclists' travel to employment centers, commercial districts, transit stations, institutions, and recreational destinations.
22. Quadruple the lane miles of protected bicycle facilities.
23. Formally adopt bike boxes for bicyclist safety at top 30 critical intersections with bicycle facilities.

24. Repurpose on-street parking spaces for bicycle parking at 25 locations.

## Encouraging Other Modes – Public Transportation

25. Coordinate transportation improvements with VIA to ensure the necessary design and operations support for the regional transit program
26. Establish a program to provide supporting transit amenities and technology (SMART CITY) along designated transit routes to encourage ridership and reduce the need to widen roadways
27. Ensure plan for bicycle and pedestrian networks support transit network

## Ridesharing/Telecommuting

28. Work with major employers and institutions to develop parking regulations and promote travel management measures such as carpooling and ride-share, flexible work hours and telecommuting, and subsidized transit passes.

## Parking

29. Develop policies for parking management that focus on improving air quality, reducing congestion, promoting alternatives to single-occupant vehicle trips.
30. Support transit oriented development in the existing core as well as new Regional Centers with parking maximums that consider shared parking and interactions among land uses.
31. Maintain existing on-street parking in established neighborhoods and commercial districts, except where parking removal is necessary to accommodate alternatives to the automobile.
32. Consider policies to reduce or eliminate on- and off-street parking where there are existing or planned major connections in the transit, bicycle, and/or pedestrian networks.
33. Focus on developing and implementing Smart City Technology and Applications

## Land Use and Transit - Supportive Development

34. Incorporate increased development requirements to mitigate traffic impacts in areas where growth is not supported, strongly enforce the existing UDC requirements for development in those areas, and cease allowing opportunities for waiving the UDC requirements.
35. Foster a more balanced distribution of growth throughout the region by encouraging development in areas where it can best be accommodated such as regional activity centers or along VIA's primary high capacity transit corridors. This will require adopting new policies or aggressively applying current policies (e.g., real property tax rebates, density bonuses, parking reductions/waivers, environmental assessment funds, tax increment financing districts (TIRZ), etc.) that will strategically entice development into locations that are better able to accommodate it than where forecasts show it to be.
36. Adopt land use policies to support transit oriented development (TOD) and transit/ alternative modes in the sub-activity nodes along the corridors that connect activity centers (i.e., higher densities, non-residential or multi-use zoning along major corridors with clear connections between transit and active modes and the community). This would stimulate economic development along corridors and help distribute and accommodate anticipated growth and encourage transit ridership.

## Efficient and Sustainable Regional Transportation

37. Periodically review and, if necessary, strengthen maintenance practices and funding allocations based on performance measures that will help extend facility life and improve user experience (e.g., use of materials, adherence to maintenance schedules based on a pavement serviceability rating, failures, hot spots, etc.)
38. Develop adaptive reuse concept for roadways to permit repurposing facilities as needs change over time (e.g., transit-only corridors, freight-only corridors, road diet adaptations, etc.)
39. Commit to seeking opportunities to work with neighbor communities and agencies to minimize interregional or interagency obstacles to travel
40. Partner to provide commuter rail connection with Austin

## Technology and Innovation

41. Adopt a technology readiness program that can accommodate the rapidly changing technological landscape of autonomous and connected vehicle systems and make provisions to incorporate them in roadway design
42. Participate in development of a managed motorways implementation plan that will allow system control across all networks in the region to maximize overall system performance using SMART CITY technology.
43. Develop policies and use ITS technology to encourage interregional and long trips through San Antonio to use alternative routes, especially during peak hours.

## Safety and Comfort

44. Identify and mitigate critical safety hot spots to minimize crashes
45. Emphasize the accommodation of multiple modes (complete streets) in the design or redesign of all transportation facilities
46. Develop a plan to eliminate existing MTP design limitations or deficiencies to enhance safety and traffic flow for all modes
47. Continue to require all projects to comply with the Americans with Disabilities Act (ADA) and establish a program to focus on priority locations near schools, transit services and within Regional Centers.

## Freight

48. Support program to build (e.g., SH 130) and use technology and wayfinding to encourage freight trips to travel around San Antonio if not destined here.
49. Support development of a technology program that will support an autonomous/connected vehicle freight program that can optimize truck flows and improve the reliability of freight system deliveries.
50. Adopt strategies to reduce the number of at-grade railroad crossings that will enhance highway safety and improve the efficiency and reliability of freight movements.
51. Encourage coordination of truck and rail freight movements as practical and complementary alternatives to each other that will help reduce congestion on San Antonio highways.

## General

52. Identify three key corridors from the Multimodal Plan to move forward using the work completed as a foundation for detailed corridor studies that will evaluate and build upon the long term options identified.
53. Create a partnership with VIA, TXDOT and the AAMPO to ensure that compatible multimodal solutions continue to be integrated with other agency plans and are supported by those agencies.
54. Establish funding partnerships between the City, VIA, TXDOT, the AAMPO and other involved agencies, to support multimodal solutions along transit corridors and at Regional Centers.
55. Establish a requirement that all projects to be implemented consider the effect on reducing VMT, emissions and energy consumption.



## Future Transportation Projects

Placeholder:

TIP Projects in the 6 year plan for Bexar County

## 5 Year Action Plan Projects

Corridor	Project Location	Project Description
San Pedro	North Star Mall	Modify signal and add pedestrian Z-Crossing
	Oblate	Add left-turn lanes on EB and WB Oblate. Add right-turn lane on SB San Pedro
	Oblate	Remove channelized right-turns on Oblate. Add crosswalk and ped signals on north side of intersection (requires added turn lanes on Oblate)
	Hildebrand	"Add EB and WB left-turn lanes at intersection; Add bike lanes on Howard Street; Hildebrand to Mulberry"
	Magnolia	Add curb extensions with parking lanes on Magnolia. Add left-turn lane on Magnolia. Close driveways near intersection and relocate fire hydrant
	Ashby	Improve mid-block pedestrian crossing by adding median to Courtland Pl and creating Z-Crossing
	Laurel	Prohibit EB and WB left turns. Add ped refuge islands and improve pedestrian crossings and sidewalks.
	Cypress	Prohibit EB and WB left turns. Add ped refuge islands and improve pedestrian crossings and sidewalks.
	Poplar — Elmira	Add median with hooded lefts at Poplar, Warren, and Marshall with pedestrian refuge. Reduce width of Maverick at intersection
	IH 35	Improve bike and ped connections under IH35 and add lighting.
SW Military	Somerset Rd	Extend median east for 1000' on SW Military
	Roosevelt	Extend median east of Curtis to Padre
	San Antonio River	Improve wayfinding to trail and Mission Road from SE Military
	Zarzamora	Install dual SB left-turn lanes
	IH 35	Widen SB and NB FR approach to Left, shared through/left, through, right
	Bynum — Quintana	Provide pedestrian crossing prior to Quintana overpass
	Norma and Boswell	Continuous green Ts at Norma and Boswell
S Flores	Construct dual SB left-turn lanes	

## 5 Year Action Plan Projects

Corridor	Project Location	Project Description
Enrique Barrera Pkwy	San Joaquin	Add second SB left-turn lane
	34 St	Add EB and WB left-turn lanes on EBP and left-turn signal phases
	36th	Better control access to streets adjacent to intersection (Jesse and San Fernando)
	San Joaquin	Realign San Joaquin to provide better radius and 90 degree intersection angle
	Commerce	Replace slip ramp with conventional right-turn lane
	Abshire	Add channelized right-turn on EB leg
	Acme — SH 151	Improve channelized right-turn island
	Acme — SH 151	Construct sidewalk to fill in gaps
	SH 151 — US 90	Add curb and sidewalk. Improve illumination
	Callaghan	Extend turn bays on on EBP
Zarzamora	Fred Rd — Culebra	Install ped ramps and improve sidewalk
	Martin — US 90	Remove poles from middle of sidewalk
	US 90 to Fredericksburg	Bury overhead utilities obstructing narrow sidewalks
	Guadalupe to Commerce	Identify locations to acquire ROW and widen sidewalks
	Nogalitos	Add dual WB left-turn lanes
	Somerset Rd	Close slip ramp adjacent to Nogalitos
	Wagner	Add RRFB or HAWK for midblock
	Guadalupe	Add NB and SB left-turn lanes.
	Darby/US 90	Close W leg of Darby and realign E leg with US 90 ramp.
	Barrett	Provide better pedestrian crossings and paths to ped bridge. Install pedestrian beacon if warranted.
	Culberson — Nogalitos	Construct sidewalk to fill in gaps
SW Military — IH 35	Construct sidewalk to fill in gaps	
Applewhite	Medina River	Install bike facilities to connect Medina River Trail to A&M SA campus
	Zarzamora	Reconfigure intersection to make through movements from WB Zarzamora to Applewhite. Provide two lanes for traffic from NB Applewhite to EB Zarzamora



## 5 Year Action Plan Projects

Corridor	Project Location	Project Description
Perrin Beitel	O'Connor	Install second EB left-turn lane on O'Connor
	410 to Judson	Add raised, landscaped median where feasible
	Stahl to 1604	Install bike facilities
	Thousand Oaks	Install second NB and SB left-turn lanes
	Wurzbach — Judson	Install one-way cycle track on both sides of road.
Wetmore	Thousand Oaks	Install dual left-turn lanes on all approaches.
	Thousand Oaks	Install pedestrian signals and ramps.
	Wurzbach Pkwy N	Add second EB left-turn lane and second EB right-turn lane
	Wurzbach Pkwy S	Add second EB right-turn lane
	Broadway	Add second SB left-turn lane
	MacArthur View	Add second SB left-turn lane
	IH 410 EB Ramp	Install traffic signal
New Braunfels	IH 35	Install EB to WB turnaround
	Burleson	Install pedestrian beacon if warranted
	Lamar — Commerce	Construct pedestrian ramps
	Commerce — Hedges	Relocate poles from middle of sidewalk
	Westfall	Remove wide flare on Westfall at intersection.
	IH 10 EBFR	Widen NB approach to add third lane at approach
	Drexel	Extend median slightly south of Drexel with median break to make intersection more visible to NB and SB traffic
	Southcross	Lengthen left-turn storage bays
	Gevers	Construct bike lanes or bike boulevard on Geves from Southcross to Sherman.
	Pecan Valley	Install NB and SB left-turn lanes
	Ada	Improve EB approach sight distance and grade.
	Steves	Install EB and WB left turn lanes
	Fair	Install SB left-turn lane
	Lasses	Install NB right-turn and SB left-turn lanes. Add sidewalk.
	SW Military	Improve illumination
Hot Wells to SW Military	Add bike lanes on New Braunfels	

## 5 Year Action Plan Projects

Corridor	Project Location	Project Description
<b>Babcock</b>	Abe Lincoln: Horn Blvd — Eckhert	Add bike lanes
	Abe Lincoln: Spring Time St/Horn Blvd	Add bike lane
	Medical Dr — Merton Minter	Implement pedestrian crossings with refuge island and approximately 1/4 mile spacing
	Loop 410 — St Cloud	Establish a consistent cross section — possibly 2 lanes with TWLTL — existing lane drops are confusing and easily overlooked with difficulty maintaining pavement markings
	Crestview — Oneoak	Install an RRFB and pedestrian refuge island to support Baskin Elementary School
	Southpoint — Loop 410	Close median break at Southpoint and extend left-turn lanes northbound and southbound at the interchange
<b>Culebra</b>	Westwood Loop	Add westbound right-turn lane at Westwood Loop, adjust lane assignments on southbound approach to a shared left-turn and thru, and a single right-turn lane, add a right-turn overlap on the following approaches (WBR, NBR, SBR)
	Loop 410 — 24th	Access management and ped crossing improvements coordinated with VIA stop locations and local points of interest (e.g. St. Mary's University). Note: A TxDOT access management project was recently approved from 24th Street to IH 10
	Grissom — Tezel	Access management
	Hamilton	Install a pedestrian z-crossing, will have an access management component
	19th St	Install a pedestrian z-crossing, will have an access management component
	Loop 410	Widen both frontage road approaches by one lane. Frontage roads should have the following lane assignments: NB should be L-L-T-T-R, SB should be L-T-T-R-R
	General McMullen	Widen NB and WB approaches to provide dual left turn bays
Westover Hills Blvd	Widen Westover Hills approach at Culebra to add right-turn bay. Re-designate existing 3 lanes as L-L-T. This change will eliminate needs for split phasing	

## 5 Year Action Plan Projects

Corridor	Project Location	Project Description
<b>Fredericksburg</b>	Vance Jackson	Clearly restrict pedestrian crossing on the south leg of the intersection
	Prue	Since the completion of Research Blvd there is no longer an operational reason to restrict left-turns from Prue Road onto Fredersickburg. Modify the signal and lane assignments to allow this turning movement.
	Huebner	Modify the traffic signal at Frederickburg Rd & Huebner Road to place the northbound right turn under signalized control with a prohibition of right turns on red durign the PM peak. This will faciliate queue management between Fredericksburg Road and the IH 10 interchange signal.
	Balcones Heights — Hildebrand	Sidewalk improvements — fill gaps, replace broken segments, appropriate driveway transitions Balcones Heights to Hildebrand
	Gardina — Vance Jackson	Install a midblock pedestrian crossign with refuge island and RRFB near the HEB training center. There are numerous pedestrian crossings to reach bus stops in this area. Will also serve new regional park.
<b>Houston</b>	Florence Alley — Picket Academy Alley	Work with Pickett Academy to establish student drop off and pick up procedures that minimize the number of vehicles stopping in the through lanes on Houston. Consider mid-block pedestrian crossing.
	St James	Add crosswalk markings on Houston Street west leg of Houston & St. James, consider RRFB installation
	New Braunfels	Improve crosswalk marking visibilityat Houston & N New Braunfels, add supplemental signage to remind turning vehicles of requirement to yield to pedestrians
	New Braunfels	Improve signage and pavement markings for left-turn movements, offset left-turns create some confusion for drivers.
	Bowie, Star	Add roundabout and wayfinding, gateway
	3rd and Bonham	Gateway design, roundabout, wayfinding, convert Houston from one-way eastbound to two-way between Bonham and Alamo Plaza
	Rosary	Add crosswalk markings on Houston Street west leg of Houston & Rosary, consider RRFB installation as this is near a school and a park

## Downtown Transportation Study Projects

Street	Project Location	Project Description
St Mary's Intersection	St. Mary's, Navarro and Nueva	Roundabout, gateway design, placemaking, wayfinding,
St. Mary's	Villita to Convent	Remove bus-only lane, widen east side sidewalk, add bike lane on east side, plantings, lightings
Alamo, Commerce, Losoya Intersection	Commerce to Market	Gateway intersection configuration, close Losoya, create pedestrian plaza, improve pedestrian crossings
Jones Intersection	Jones at Camden, St Mary's	Roundabout, gateway design, placemaking, wayfinding, sight distance corrections
Santa Rosa	Martin to Cesar Chavez	"Streetscaping, plantings, furnishings and lighting Martin to Commerce — reduce from 6 lanes to 4 lanes to add bike lanes with 3 foot buffer. Commerce to Market — reduce lane widths to add outside lanes with sharrows Market to Nueva — reduce from 6 lanes to 4 to add bike lanes with 3 foot buffer"
Navarro	Villita to Convent	Remove bus-only lane, widen sidewalk and add on-street parking with curb extensions on east side, widen lane with sharrows on west side, landscaping, curb extensions at bus stop locations
Flores	Market/Dolorosa to Old Guilbeau	"Old Guilbeau to Stumberg — reduce from 3 lanes to 2 lanes with center turn lane or median with midblock pedestrian crossing, curb bulbouts and on-street parking Stumberg to Nueva — reduce from 4 lanes to 3 with parking on east side Nueva to Dolorosa/Market — 3 lanes with parking on both sides"
Broadway	3rd to Josephine	Incorporate Complete Street improvements, reduce from 6 to 5 lanes, add placemaking, widen sidewalks, on-street parking, streetscaping
Lonestar	Roosevelt to Probandt	Improve sidewalks, add bike facilities, add lighting, LID, improve connection to the River.
Probandt	Lonestar to Alamo	Restripe to add bike lanes, improve sidewalks, complete gaps where sidewalk is missing, add lighting, incorporate medians in place of TWLTL where possible
Jones	Alamo to Camden	Reduce from 4 lanes to 2 lanes or reduce width, add bike lanes to both sides, add reverse-angle parking between Broadway and Avenue B, lighting and streetscaping

### Bike Facility Projects

Roadway	Limits	Associated Multimodal Corridor
<b>Abe Lincoln</b>	Eckhart to Horn Boulevard/Spring Time Street	Babcock
<b>Alamo Street</b>	Alamo Plaza to Blue Star Arts Complex	
<b>Babcock</b>	Spring Time to Horn Boulevard	Babcock
<b>East-West Bike Trail</b>	NW Military to Blanco Road (off road trail in utility easement)	
<b>Enrique Barrera Pkwy</b>	US Highway 90 to Commerce Street	Enrique Barrera Parkway
<b>Gevers Street</b>	Sherman Street to Southcross Boulevard	New Braunfels
<b>Howard Street</b>	Mulberry Avenue to Hildebrand Avenue	San Pedro
<b>New Braunfels</b>	Hot Wells to SW Military	New Braunfels
<b>Nacogdoches</b>	Wurzbach Parkway to Judson Road	Perrin Beitel/Nacogdoches